ABSTRACT OF THE DISCLOSURE

A password registration unit encrypts key information using an input password, and stores the generated encrypted key as a file into a computer. A file encryption unit generates a file key arbitrarily, encrypts the file key using the key information, encrypts a plaintext using the file key to generate a ciphertext, and stores an encrypted file including the encrypted file key in its header part and the ciphertext in its data part. A file decryption unit decrypts the encrypted file key using the key information to obtain a file key, or receives an input of a password, decrypts the encrypted key using the password to obtain key information, and decrypts the encrypted file key using the key information to obtain a file key. The file decryption unit then decrypts the ciphertext using the obtained file key.